

thereof, thiol group or a derivative thereof, malaimide or a derivative thereof, alkene or a derivative thereof, azide or a derivative thereof, alkyne or a derivative thereof, coumarin or a derivative thereof, or a combination thereof.

14. The compound of claim **12**, wherein the charged group is the moiety or derivative or analog of arginine, lysine, guanidine, amine, amidine, tetrazole, hydroxyl, carboxyl, phosphate, sulfonate, methanesulfonamide, sulfonamide, or oxalic acid and functional groups.

15. The compound of claim **12**, wherein the neutral group is the moiety or derivative or analog of sugars, peptides, hydrophilic polymers, long-chain alkanes (C_1 - C_{50}) and fatty acids (C_1 - C_{50}), aromatic molecules, esters, halogens, nitro-compounds, anthracyclines, fluorocarbons, silicones, certain steroids such as cholesterol, terpenoids, vitamins, and polymers (e.g., PLGA, polycaprolactone, polylactic acid, polyglycolic acid, polystyrene and polyisoprene, polyvinyl pyridine); amphiphilic groups, cholic acid, riboflavin, chlorogenic acid and natural compound extract and synthetic compounds.

16. A nanocarrier comprising a plurality of compounds of claim **1**.

17. The nanocarrier of claim **16**, wherein the nanocarrier further comprises one or more charged proteins.

18. The nanocarrier of claim **17**, wherein the nanocarrier further comprises a cationic polymer.

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